

Supplement DS1

Internal consistency of the adequacy of help received (AHR) measure with the Montreal Assessment of Need Questionnaire

Internal consistency for adequacy of help received (AHR) was measured with the Montreal Assessment of Need Questionnaire (MANQ) in a previous study involving 354 participants. This sample of patients is extensively described in previous published studies (1, 2). AHR was measured with two analogical scales, ranging from 0 to 10 for each of the 26 possible areas of need (10 = greatest adequacy). One scale measured qualitative adequacy (type of help) and the other quantitative adequacy (amount of help).

Internal consistency was assessed with the Cronbach's alpha coefficient which is calculated from the sum of qualitative and quantitative AHR scores for each of the 26 possible areas of need. We used the *psych* package (3) of the R statistical software version 3.2.2 (4).

3 areas of need were discarded from the analysis as very few patients presented needs in these domains: alcohol (10.2% of patients with a need severity greater than 0), child care (6.5% of patients with a need severity greater than 0) and telephone (3.4% of patients with a need severity greater than 0). We found excellent internal consistency among the remaining areas of need, with a Cronbach's alpha of 0.91 (95% confidence boundaries: 0.89–0.93).

References

1. Fleury M-J, Grenier G, Bamvita J-M, Piat M, Tremblay J. Adequacy of help received among individuals with severe mental disorders. *Administration and Policy in Mental Health and Mental Health Services Research*. 2014; 41(3): 302-16.
2. Tremblay J, Bamvita JM, Grenier G, Fleury MJ. Utility of the Montreal assessment of need questionnaire for community mental health planning. *J Nerv Ment Dis*. 2014; 202(9): 677-87.
3. Revelle W. *psych: Procedures for personality and psychological research*. Northwestern University, Evanston R package version. 2014; 1(1).
4. Ihaka R, Gentleman R. R: a language for data analysis and graphics. *J Comput Graph Stat*. 1996; 5(3): 299-314.

Table DS1. Pearson's correlations for participant evaluations of needs, service performance and outcomes (n=339)

	1		2		3		4		5	
	r	p ¹	r	p ¹	r	p ¹	r	p ¹	r	p ¹
1 Intensity of needs (MANQ ²)										
2 Adjusted adequacy of help (MANQ ²)	-0.14	0.007								
3 Continuity of care (ACSS ³)	-0.23	<0.001	0.24	<0.001						
4 Recovery orientation of services (RSA-R-PIR ⁴)	-0.23	<0.001	0.3	<0.001	0.61	<0.001				
5 Quality of life (SLDS ⁵)	-0.59	<0.001	0.24	<0.001	0.36	<0.001	0.33	<0.001		
6 Personal recovery (RAS ⁶)	-0.37	<0.001	0.11	0.121	0.24	<0.001	0.33	<0.001	0.43	<0.001

1. p values were computed from standard error estimates using bootstrap with 2000 iterations.

2. Montreal Assessment of Need Questionnaire

3. Alberta Continuity of Services Scale for Mental Health

4. Recovery Self-Assessment, Revised Person in Recovery version

5. Satisfaction with Life Domains Scale

6. Recovery Assessment Scale

Table DS2. Statistics for the Estimated Standardized Path Coefficients and Factor Loadings

	Variables	Estimate	Standard Error⁶	z	p
Standardized Path Coefficients	Needs -> Service performance	-0.3	0.06	-4.9	<0.001
	Service Performance -> outcomes	0.4	0.07	5.6	<0.001
	Needs -> outcomes	-0.6	0.06	-10.8	<0.001
Factor Loadings	Service performance -> adjusted adequacy of help (MANQ ⁶)	0.36	0.06	6.5	<0.001
	Service Performance -> Continuity of care (ACSS ⁶)	0.76	0.05	14.6	<0.001
	Service Performance -> recovery service orientation (RSA-R-PIR ⁶)	0.8	0.05	14.9	<0.001
	Outcomes -> quality of life (SLDS ⁶)	0.8	0.05	17.3	<0.001
	Outcomes -> personal recovery (RAS ⁶)	0.54	0.08	6.7	<0.001

1. Standard errors were estimated using model-based bootstrapping with 2000 iterations.

2. Montreal Assessment of Need Questionnaire

3. Alberta Continuity of Services Scale for Mental Health

4. Recovery Self-Assessment, revised person in recovery version

5. Satisfaction with Life Domains Scale

6. Recovery Assessment Scale